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MASS TRANSPORTATION PROBLEMS IN URBAN AREAS

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Presented to the Annual Meeting
BOARD OF MANAGERS,
THE COUNCIL OF STATE GOVERNMENTS

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Members of the Board of Managers,
Council of State Governments:

My purpose here today is to discuss the urgent need for co-ordinated development, planning and financing of economical facilities for transportation of people in heavily populated metropolitan areas. Specifically, I am advocating co-ordinated "total transportation" planning and construction by the Federal, state and local highway agencies, and transportation companies.

For more than a generation, under the influences of restrictive Federal policies governing the distribution of matching highway funds, we have been building highways in both urban and non-urban areas merely to move privately owned motor vehicles, not people.

As a nation, we are now suffering severely from the cumulative effects of these Federal highway policies which, throughout the years, have been applied largely without regard to their destructive effects upon other forms of transportation, upon the urban economy, or upon the planning and development of urban areas where the nation's population is now being rapidly concentrated.

While the transportation crisis is now particularly acute in large metropolitan areas, which are perilously close to the saturation point in automobiles, non-urban areas inevitably must soon be harmfully affected unless we begin to conserve our highway funds by proper planning and proper expenditures.

Without co-ordinated planning and construction for total transportation needs, we shall be compelled by this national transportation crisis to pour billions of dollars into urban areas to rescue them from the traffic morass. Even if we co-ordinate our efforts and our dollars, we cannot avoid the rescue task, but we can conserve billions of dollars in doing the job. And the billions thus saved will be available for inter-city highways, the all-important links in our farm-to-market highway system.

In scope and depth, the transportation crisis confronting the nation is stupendous.

Publicly financed expenditures for highways alone now total more than \$4 billion a year. To this must be added millions spent for street improvements, traffic controls, traffic regulation and parking accommodations. Yet every large city is plagued with swiftly increasing traffic congestion, and every segment of urban economy is paying the penalty.

Urban surface transportation is slower, costlier and less attractive; marketing and manufacturing costs are increased; real estate values are impaired; de-centralization and blight are accelerated, and tax revenue problems of local governments are intensified.

Throughout the nation, this needless economic waste totals billions of dollars annually. In the New York metropolitan area alone, the economic waste from traffic congestion is estimated at \$2 billion a year.

To this staggering waste must be added the tremendous cost of steadily increasing traffic accidents--the heavy death toll, the heavy costs of personal injuries and property damage.

In the present pattern of planning, the accepted remedy for this desperate situation is construction of more multi-lane, multi-million dollar expressways; more costly street-widening and more costly grade separations.

Urban traffic congestion, however, continues to increase unchecked. Almost without exception, multi-million dollar expressways intended to alleviate urban traffic congestion are jammed to beyond capacity on opening day. ^{1 p 22} Then public clamor is renewed for more expressways, more parking lots and garages for storage of expressway traffic in off-peak periods. And thus is the vicious circle of economic waste expanded and perpetuated.

The utter futility of this procedure, which places complete reliance upon automobiles for moving people, can be amply illustrated.

In Chicago, for example, in the peak hour, approximately 226,000 workers and late shoppers leave the downtown area by various forms of transportation. Approximately 186,000 of them use public transportation--buses, rapid transit and commuter railroads. Only 39,000 people--about 17 per cent of the one hour total--leave by private automobiles and taxicabs. Yet these vehicles, performing only a small fraction of the transportation job, are primarily responsible for the area's rush hour traffic congestion.

Assume for the moment, if you will, that these 186,000 people departing by public transportation in the peak hour were shifted to automobiles and taxicabs. This would be the frightening result: A total of 166 more expressway lanes--83 outbound and 83 inbound--would be required; and parking space would have to be provided for 125,000 more automobiles.

Under these conditions, Chicago's famous Loop would completely disappear. It would become a barren expanse of concrete and asphalt because all of the space now occupied by productive business enterprises would be needed for expressway lanes, access ways and exits, and automobile parking facilities.

The tax loss to governmental agencies would be tremendous. Even now it is estimated that the City of Chicago is losing approximately \$6,285,000 a year in tax revenues that would be produced if land in the area now used for private parking were occupied by productive enterprises.

A quick look into the future reveals conditions utterly appalling, unless we abandon the present shortsighted highway policies, and begin planning and building on the basis of the nation's total transportation needs.

By 1980, according to U.S. Census Bureau projections, the nation's population may total 273,000,000, an increase of 122,000,000. And the so-called Standard Metropolitan Areas may total 200 and contain a population of 165,000,000, which would exceed the population of the entire nation in 1950.

The first part of the paper is devoted to the study of the
properties of the function $f(x)$ defined by the equation
 $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a constant
function. The second part of the paper is devoted to the
study of the function $g(x)$ defined by the equation
 $g(x) = \int_0^x g(t) dt$. It is shown that $g(x)$ is a constant
function. The third part of the paper is devoted to the
study of the function $h(x)$ defined by the equation
 $h(x) = \int_0^x h(t) dt$. It is shown that $h(x)$ is a constant
function.

The fourth part of the paper is devoted to the study of the
function $k(x)$ defined by the equation
 $k(x) = \int_0^x k(t) dt$. It is shown that $k(x)$ is a constant
function. The fifth part of the paper is devoted to the
study of the function $l(x)$ defined by the equation
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function. The tenth part of the paper is devoted to the
study of the function $q(x)$ defined by the equation
 $q(x) = \int_0^x q(t) dt$. It is shown that $q(x)$ is a constant
function.

For these metropolitan areas, there would be an astounding population growth--an increase of 80,000,000 in the 30 years between 1950 and 1980. Experts figure that such a population increase in metropolitan areas could mean an increase of 32,000,000 workers.

It would be the height of absurdity if we were to attempt to transport these 32,000,000 additional workers, or even a sizeable part of the total, to and from their daily work by automobile.

Fortunately, there is a rapidly growing conviction among public officials, highway planners and the public generally, that the nation can no longer plan and build transportation facilities primarily for the private automobile.

There are many manifestations of this conviction. In Los Angeles, where costly expressways are piled one on top of the other and have reached perhaps their highest point of development, transportation experts are now declaring that expressways cannot and will not solve the city's traffic mess. They are urging co-ordination of highway planning and construction with other more efficient modes of transportation.

In San Francisco, public officials have taken positive action against unco-ordinated planning and construction of additional expressways within the metropolitan area. They have rejected, at least temporarily, \$377,000,000 in freeway construction planned by the State Highway Department, challenging the locations, design and actual need for the proposed highways.

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The State Senate of California has gone a step further by adopting a resolution requesting all state and local highway and transportation agencies to co-ordinate their planning and construction of highway and other types of transportation facilities so that maximum safety, efficiency and economy may be attained.

In Chicago, a new approach to the problem of urban transportation, based upon co-ordinated and co-operative public agency planning, financing and construction, has been pioneered in the Congress Expressway by integrating rail rapid transit in the expressway right-of-way.

By this simple and relatively inexpensive process of co-ordination, the passenger carrying capacity has been increased three to five-fold. Under favorable circumstances, this very substantial passenger-carrying capacity can be achieved at a cost ratio of one-fifth for transit to four-fifths for expressway facilities.

Right now the expressway, although still incomplete, is operating almost to capacity, while the rapid transit facility, operating at only 30 per cent of ultimate capacity, is carrying 50 per cent more people in the rush direction in peak hours than the expressway.

Among the State governments, as the members of this Board and Council are fully aware, there is grave concern about the present highway policies, which, over the years, have been influenced and shaped by the Federal government. During the 1959 sessions of state legislatures, at least 12 state highway study committees were created or continued.

Manifestations of concern, however, will not solve the nation's transportation problem, which, as complicated as it is today, is certain to become much more complex as the nation's population soars toward the projected 273, 000, 000 figure by 1980.

Time is rapidly running out. If the nation's economy is to be protected against the mounting flood of traffic congestion, corrective action must be prompt and comprehensive.

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